

*If you are using a printed copy of this procedure, and not the on-screen version, then you **MUST** make sure the dates at the bottom of the printed copy and the on-screen version match. The on-screen version of the Collider-Accelerator Department Procedure is the Official Version. Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ Training Office, Bldg. 911A*

C-A OPERATIONS PROCEDURES MANUAL

ATTACHMENT

4.120.72.f LINAC Chipmunk Tests

C-A-OPM Procedures in which this Attachment is used.		
4.120.72		

Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Approved: _____ *Signature on File* _____
 Collider-Accelerator Department Chairman Date

V. Castillo

4.120.72.f LINAC Chipmunk Tests

PASS ANNUAL ACCEPTANCE TEST PROTOCOL

Division A Software Filename and Checksum: Title: _____ Checksum: _____

Division B Software Filename and Checksum: Title: _____ Checksum: _____

Initial testing complete:

Test Team Leader's Name (Print): _____ Life Number: _____

Test Team Leader's Name (Sign): _____ Date: ____/____/____

Acceptance test procedure complete (following repairs and retesting if required):

Test Team Leader's Name (Print): _____ Life Number: _____

Test Team Leader's Name (Sign): _____ Date: ____/____/____

Test results reviewed by:

Safety Section Head's Name (Print): _____ Life Number: _____

Safety Section Head's Name (Sign): _____ Date: ____/____/____

Test results accepted by Radiation Safety Committee:

RSC Member's Name (Print): _____ Life Number: _____

RSC Member's Name (Sign): _____ Date: ____/____/____

1.1 Test of Chipmunk NMO 62, area monitor, located U/S of Linac Plug Door

- | | | | |
|--------------------------|---|---|-----------------|
| <input type="checkbox"/> | VERIFY | Chipmunk calibration date [____/____/____] is | VALID |
| <input type="checkbox"/> | VERIFY | Chipmunk is in good physical condition and is | CHIRPING |
| <input type="checkbox"/> | VERIFY | MCR sees Chipmunk keep-alive counts | O.K. |
| <input type="checkbox"/> | VERIFY | NMO 62 was source-tested to MCR on ____/____/____ | OK |
|
 | | | |
| <input type="checkbox"/> | Check for test acceptance of Chipmunk NMO 62 | | |

1.2 Test of Chipmunk NMO 63 located at Linac Tank 4/5

- | | | | |
|--------------------------|---|---|-----------------|
| <input type="checkbox"/> | VERIFY | Chipmunk calibration date [____/____/____] is | VALID |
| <input type="checkbox"/> | VERIFY | Chipmunk is in good physical condition and is | CHIRPING |
| <input type="checkbox"/> | VERIFY | MCR sees Opto monitor Chipmunk NMO 63 | O.K. |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay BK14 is | ON |
|
 | | | |
| | DISCON | NMO 63 from Security interface box for failsafe test | |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay BK14 | OFF |
| <input type="checkbox"/> | VERIFY | MCR sees at Opto monitor NMO 63 | IN'LOCK |
| | RESET | NMO 63 from MCR Opto monitor | |
| <input type="checkbox"/> | VERIFY | MCR sees NMO 63 | OK |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay BK14 is | ON |
|
 | | | |
| | PRESS | Trip button on chipmunk NMO 63 | |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay BK14 | OFF |
| <input type="checkbox"/> | VERIFY | MCR sees at Opto monitor NMO 63 | IN'LOCK |
| | RESET | NMO 63 from MCR Opto monitor | |
| <input type="checkbox"/> | VERIFY | MCR sees NMO 63 | OK |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay BK14 is | ON |
|
 | | | |
| <input type="checkbox"/> | Check for acceptance of Test Chipmunk NMO 63 located at Linac Tank 4/5 | | |

1.3 Test of Chipmunk NMO 68 located at Linac Tank 1

- | | | | |
|--------------------------|---|--|-----------------|
| <input type="checkbox"/> | VERIFY | Chipmunk calibration date [____/____/____] is | VALID |
| <input type="checkbox"/> | VERIFY | Chipmunk is in good physical condition and is | CHIRPING |
| <input type="checkbox"/> | VERIFY | MCR sees at Opto monitor Chipmunk NMO 68 | O.K. |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay CK8 is | ON |
|
 | | | |
| | DISCON | NMO 68 FROM interface box for failsafe | |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay CK8 | OFF |
| <input type="checkbox"/> | VERIFY | MCR sees at Opto monitor NMO 68 | IN'LOCK |
| | RESET | NMO 68 from MCR Opto monitor | |
| <input type="checkbox"/> | VERIFY | MCR sees NMO 68 | OK |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay CK8 is | ON |
|
 | | | |
| | PRESS | Trip button on chipmunk NMO 68 | |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay CK8 | OFF |
| <input type="checkbox"/> | VERIFY | MCR sees at Opto monitor NMO 68 | IN'LOCK |
| | RESET | NMO 68 from MCR Opto monitor | |
| <input type="checkbox"/> | VERIFY | MCR sees NMO 68 | OK |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay CK8 is | ON |
|
 | | | |
| <input type="checkbox"/> | Check for acceptance of Test Chipmunk NMO 68 located at Linac Tank 1 | | |

1.4 Test of Chipmunk (# 1) NMO 61 located at BLIP Pump House

- | | | | |
|--------------------------|---|---|-----------------|
| <input type="checkbox"/> | VERIFY | Chipmunk calibration date [____/____/____] is | VALID |
| <input type="checkbox"/> | VERIFY | Chipmunk is in good physical condition and is | CHIRPING |
| <input type="checkbox"/> | VERIFY | MCR sees Opto monitor Chipmunk NMO 61 | O.K. |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay AK13 is | ON |
|
 | | | |
| | DISCON | NMO 61 from Security interface box for failsafe test | |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay AK13 | OFF |
| <input type="checkbox"/> | VERIFY | MCR sees at Opto monitor NMO 61 | IN'LOCK |
| | RESET | NMO 61 from MCR Opto monitor | |
| <input type="checkbox"/> | VERIFY | MCR sees NMO 61 | OK |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay AK13 is | ON |
|
 | | | |
| | PRESS | Trip button on chipmunk NMO 61 | |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay AK13 | OFF |
| <input type="checkbox"/> | VERIFY | MCR sees at Opto monitor NMO 61 | IN'LOCK |
| | RESET | NMO 61 from MCR Opto monitor | |
| <input type="checkbox"/> | VERIFY | MCR sees NMO 61 | OK |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay AK13 is | ON |
|
 | | | |
| <input type="checkbox"/> | Check for acceptance of Test Chipmunk (# 1) NMO 61 located BLIP Pump House | | |

1.5 Test of Chipmunk (# 2) NMO 65 located at BLIP Pump House

- | | | | |
|--------------------------|--|---|-----------------|
| <input type="checkbox"/> | VERIFY | Chipmunk calibration date [____/____/____] is | VALID |
| <input type="checkbox"/> | VERIFY | Chipmunk is in good physical condition and is | CHIRPING |
| <input type="checkbox"/> | VERIFY | MCR sees Opto monitor Chipmunk NMO 65 | O.K. |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay BK15 is | ON |
|
 | | | |
| | DISCON | NMO 65 from Security interface box for failsafe test | |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay BK15 | OFF |
| <input type="checkbox"/> | VERIFY | MCR sees at Opto monitor NMO 65 | IN'LOCK |
| | RESET | NMO 65 from MCR Opto monitor | |
| <input type="checkbox"/> | VERIFY | MCR sees NMO 65 | OK |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay BK15 is | ON |
|
 | | | |
| | PRESS | Trip button on chipmunk NMO 65 | |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay BK15 | OFF |
| <input type="checkbox"/> | VERIFY | MCR sees at Opto monitor NMO 65 | IN'LOCK |
| | RESET | NMO 65 from MCR Opto monitor | |
| <input type="checkbox"/> | VERIFY | MCR sees NMO 65 | OK |
| <input type="checkbox"/> | VERIFY | At encl 4880 relay BK15 is | ON |
|
 | | | |
| <input type="checkbox"/> | Check for acceptance of Test Chipmunk (# 2) NMO 65 located at BLIP Pump House | | |

END OF TEST PROCEDURE

TTL: Sign for completion of initial testing: _____

Date: ____/____/____

TTL: Sign for completion of final testing: _____

Date: ____/____/____